

SECTION 15860
SHEET METAL ACCESSORIES

PART 1 - GENERAL

1.1 GENERAL CONDITIONS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions apply to work of this section.

1.2 WORK INCLUDED

- A. Access doors.
- B. Fire/smoke dampers.
- C. Balancing dampers.
- D. Flexible duct connections.
- E. Backdraft dampers.

1.3 QUALITY ASSURANCE

- A. Fire and smoke dampers shall be U.L. listed and constructed in accordance with U.L. Standards 555 and 555S, smoke dampers.
- B. Fusible links on fire and smoke dampers shall be constructed to U.L. Standard 33, Fusible Links for Fire Protection Service.
- C. Demonstrate re-setting of fire dampers to authorities having jurisdiction and Owner's representative.
- D. Access doors shall be U.L. labeled.

1.4 SUBMITTALS

- A. Comply with Section 15000, Mechanical General Provisions.
- B. Manufacturer's Data:
 - 1. Access doors.
 - 2. Fire/smoke dampers.
 - 3. Balancing dampers.
 - 4. Flexible duct connections.
 - 5. Backdraft dampers.

C. Operation and Maintenance Manuals:

1. Fire dampers
2. Motorized dampers

PART 2 - PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

A. Access Doors

1. Air Balance, Inc.
2. Ruskin
3. Ventfabrics, Inc.

B. Fire Dampers and Smoke Dampers

1. Prefco
2. Air Balance, Inc.
3. Ruskin
4. Safe Air

C. Balancing Dampers

1. Louvers & Dampers
2. Ruskin
3. Air Balance, Inc.
4. Arrow

D. Flexible Duct Connections

1. Ventfabrics
2. Duro Dyne
3. Cain Manufacturing Co.

E. Motorized Dampers

1. Greenheck
2. Louvers & Dampers
3. Ruskin

- F. Backdraft Dampers
 - 1. Greenheck
 - 2. Ruskin
 - 3. Louvers & Dampers
 - 4. Arrow

2.2 ACCESS DOORS

- A. Fabricate rigid and close-fitting doors of galvanized or stainless steel, to match ductwork, with sealing gaskets and quick fastening locking devices. For insulated ductwork, install minimum one inch thick insulation with sheet metal cover.
- B. Provide two hinges and two sash locks for sizes up to 18 inch square, two hinges and two compression latches with outside and inside handles for sizes up to 24 inch x 48 inch. Provide an additional hinge for larger sizes.
- C. Minimum size shall be 10" x 10" unless duct size prohibits, in which case the largest size that the largest duct dimension will accommodate shall be used.

2.3 FIRE AND SMOKE DAMPERS

- A. Fabricate of galvanized steel weighted to close and lock in closed position when released by fusible link. Provide with spring closure (i.e. dynamic rating).
- B. Fire dampers shall be curtain type.
- C. Curtain type fire dampers shall have blades retained in a recess so free area of connecting ductwork is not reduced.
- D. Select fusible links for 160 degree F release.

2.4 SMOKE DAMPERS

- A. 16 gauge galvanized steel channel frame, 16 gauge galvanized steel damper blades.
- B. Smoke dampers shall be parallel blade type with external linkage concealed in frame.
- C. Flexible metal compression type jamb seals.
- D. Provide with 120 volt electric actuator mounted out of the airstream.
- E. Smoke dampers must qualify to and be classified under UL 555S Leakage Class III.

2.5 BALANCING DAMPERS

- A. Fabricate of galvanized steel, minimum 16 gauge and provide with quadrants or adjustment rod and lock screw.
- B. Fabricate single blade dampers for duct sizes to 12 inch x 48 inch.

- C. Fabricate multi-blade damper of opposed blade pattern with maximum blade size 12 inch x 72 inch. Assemble center and edge crimped blade in prime coated or galvanized channel frame with suitable hardware.

2.6 FLEXIBLE DUCT CONNECTIONS

- A. Flexible duct connectors shall be preassembled metal to exposed fabric to metal. Fabric and metal shall be joined by means of a double lock seam. Fabric shall be neoprene and shall be minimum 3 inch width between metal sections.

2.7 APPLICATION

- A. Provide access doors for inspection and cleaning before and after filters, coils, fans, automatic dampers, at fire and smoke dampers, and elsewhere as indicated. Review locations prior to fabrication.
- B. Provide fire and smoke dampers at locations shown, where ducts and outlets pass through fire rated components, and where required by authorities having jurisdiction. Fire and smoke dampers shall be installed complete with required perimeter mounting angles, sleeves, breakaway duct connections, fasteners, and firestopping materials.
- C. Provide balancing dampers at points on low pressure supply, return and exhaust systems where branches are taken from larger ducts for air system balancing.
- D. Provide flexible connections immediately adjacent to equipment in ducts associated with fans and equipment subject to forced vibration. This includes factory or factory and field fabricated air handling units where flexible connectors are not a part of the package.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Install items in accordance with manufacturer's written installation instructions.
- B. Attach flexible duct connectors to ductwork and equipment by screws or bolts at 6 inch intervals and sealant to provide airtight connection. Flexible duct connectors shall be installed to maintain minimum 1.5 inches clearance between metal flanges.

END OF SHEET METAL ACCESSORIES